

Title (en)

MATERIAL HANDLING VEHICLE HAVING A MULTI-PIECE BUMPER ASSEMBLY

Title (de)

MATERIALHANDHABUNGSFAHRZEUG MIT MEHRTEILIGER STOSSFÄNGERANORDNUNG

Title (fr)

VÉHICULE DE MANUTENTION DE MATÉRIAUX AYANT UN ENSEMBLE PARE-CHOC EN PLUSIEURS PARTIES

Publication

**EP 3718831 A1 20201007 (EN)**

Application

**EP 20167619 A 20200401**

Priority

US 201962830107 P 20190405

Abstract (en)

A bumper assembly for a material handling vehicle is provided. The material handling vehicle includes a vehicle frame. The bumper assembly includes a first bumper coupled to a first side of the vehicle frame and having a first slot extending along a portion of the first bumper and a first protruding portion. The first protruding portion extends outwardly at an angle past a plane defined by the first side of the vehicle frame. The bumper assembly further includes a second bumper coupled to a second side of the vehicle frame opposite to the first side and having a second slot extending along a portion of the second bumper and a second protruding portion. The second protruding portion extends outwardly at an angle past a plane defined by the second side of the vehicle frame.

IPC 8 full level

**B60R 19/18** (2006.01); **B60R 19/24** (2006.01); **B60R 19/42** (2006.01); **B60R 19/54** (2006.01); **B66F 9/075** (2006.01); **B66F 17/00** (2006.01); **E02F 9/16** (2006.01)

CPC (source: CN EP US)

**B60R 19/02** (2013.01 - CN); **B60R 19/18** (2013.01 - EP); **B60R 19/24** (2013.01 - EP); **B60R 19/42** (2013.01 - EP); **B60R 19/483** (2013.01 - CN US); **B60R 19/54** (2013.01 - EP); **B66F 9/07513** (2013.01 - EP); **E02F 9/0858** (2013.01 - EP); **B60R 19/04** (2013.01 - US); **B60R 19/42** (2013.01 - US); **B60R 2019/026** (2013.01 - US); **B60R 2019/186** (2013.01 - EP)

Citation (applicant)

US 201962830107 P 20190405

Citation (search report)

- [I] US 2018057329 A1 20180301 - POESCHL FRANZ [DE], et al
- [A] KR 20120007652 U 20121107

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 3718831 A1 20201007**; AU 2020202311 A1 20201022; CA 3077787 A1 20201005; CN 111791818 A 20201020; CN 111791818 B 20240301; US 11383660 B2 20220712; US 11577676 B2 20230214; US 2020317150 A1 20201008; US 2022340094 A1 20221027

DOCDB simple family (application)

**EP 20167619 A 20200401**; AU 2020202311 A 20200401; CA 3077787 A 20200402; CN 202010254800 A 20200402; US 202016837907 A 20200401; US 202217859308 A 20220707